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SDMS# 964981



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IRECO Incorporated

RCPA

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15 December 1988

Mr. Terry Brown  
U.S. Environmental Protection Agency, Region VIII (8HWM-RI)  
999 Eighteenth Street, Suite 500  
Denver, CO 80202

Re: Closure of Burning Ground at Lehi, Site A Plant

Dear Terry:

In accordance with your request, I am forwarding to you reports of our testing to date of the soils in the burn pit at Lehi, Site A. This testing has been done pursuant to the Closure Plan for this facility. Included are the following:


1. Detonation test results - on Sample Chain of Custody sheet.
2. Memorandum dated 14 December 1988, conveying results of soil analysis of samples collected 8 September 1988.
3. Laboratory analysis request results for soils excavated from the burn pit (prior to reburning).
4. Laboratory analysis request results for three samples taken after reburning (23 November 1988).

You will note that while some of the samples in the initial sampling (8 September) are above the levels established for clean closure in the Closure Plan, reburning seems to have significantly reduced these concentrations. It is expected that further burning will reduce them to the specified levels.

If you have any questions, please do not hesitate to call.

Very truly yours,

IRECO Incorporated

  
Susan R. Poulter  
Assistant General Counsel

SRP/hbg

cc: Deane Zeller, BLM  
Lorene Christensen, Bureau of Reclamation  
C.D. Bonner  
B.E. Venable

R7485

The Explosives Technology Company

## IRECO INCORPORATED

## LEHI PLANT, SITE A

Sample Chain of CustodySample SectionSample I.D. Number: South West, North West, South East, North East and CenterSample Collected by: Bruce Venable Title: Environmental CoordinatorSample Collection Date: 7 Sept 1988 Time: 7:30-15:30Sample Description: Sail sample - 4 grab samples composited into 1 rep. sampleSample Location: Lehi side A Burning ground.Analysis Required: open Detonation - see closure plan

Sample Delivered To: \_\_\_\_\_ Title: \_\_\_\_\_

Laboratory SectionSample Received By: NA Title: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Sample Air-Dry Start: \_\_\_\_\_ Finished: \_\_\_\_\_

Sample Delivered To: \_\_\_\_\_ Title: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Test SectionSample Received By: Donna M. Bowman Title: Test site managerDate: 9-8-88 Time: 2:45Sample Tested By: Donna M. Bowman Title: Test site managerDate: 9-8-88 Time: 3:01Test Results: All samples failed to react.

# IRECO MEMORANDUM

DATE: December 14, 1988

TO: S. R. Poulter

SUBJECT: Analysis of Soil Samples from Lehi Site A

FROM: R. H. Granholm

Following are the final results of RDX, TNT, and PETN analyses of soil samples collected from Lehi Site A by Bruce Venable on 8 September 1988. The samples were analyzed during the period 3 October 1988 through 3 November 1988. The detection limit for PETN is 500 ppm (0.05%).

<u>Sample</u>	<u>RDX</u>	<u>TNT</u>	<u>PETN</u>
Authoritative	off scale (~1-2%)	0.46%	<0.05%
NE	0.011%	<0.001%	<0.05%
NW	0.137%	0.014%	<0.05%
SE	0.056%	0.004%	<0.05%
SW	0.155%	0.011%	<0.05%

R. H. Granholm  
R. H. Granholm

RHG/afw

RHG-01C



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## LABORATORY ANALYSIS REQUEST

SAMPLE DESCRIPTION:

LOG #

Soil from Lchi Site A burning ground

TO:

Lab

TIME CHARGE NO.:

R-9

DATE:

11/11/88

FROM:

Bruce Venable

APPROVAL:

RHZ

ANALYZE FOR:

SCREEN ANALYSIS (U.S.)

	SCREEN	✓	RESULTS	SCREEN	✓	RESULTS
RDX, TNT on HPLC						
						-20 / +30
						-30 / +40
						-40 / +50
						-50 / +60
3 Sample Total LA-1 North						-60 / +100
<del>South West</del>	+8					-100 / +140
Next.	-8 / +12					-140 / +200
	-12 / +14					-200 / +325
	-14 / +16					-325
	-16 / +20					

RESULTS:

Sample	Range (ppm)		Ave. (ppm)	
	RDX	TNT	RDX	TNT
★ North A	2300-2310	191-196	2305	194
North B	2230-2260	270-276	2245	273
West	524-541	117-123	533	120
Next	167-178	38-38	173	38

★ The range between North A and B was wider than desired.  
Repeat aliquots of A and B show the precision of the analysis.

piles of dirt that were excavated from the bottom of the burning pit.

SIGNED:

Blake J. Maxfield

DATE:

11/17/88

# LABORATORY ANALYSIS REQUEST

SAMPLE DESCRIPTION:		LOG #	
Soil from C-1 site A burning ground			
TO:	TIME CHARGE NO.:	DATE:	
Lab	R9	23 Nov 1988	
FROM:	APPROVAL:		
B.V.	TRHJ		

ANALYZE FOR:		SCREEN ANALYSIS (U.S.)					
		SCREEN	✓	RESULTS	SCREEN	✓	RESULTS
RDX, TNT					- 20 / + 30		
					- 30 / + 40		
3 Samples: LA-003 Surface					- 40 / + 50		
LA-003 3rd					- 50 / + 60		
LA-003 12"		+ 8			- 60 / + 100		
		- 8 / + 12			- 100 / + 140		
West end of Burning Ground - All		- 12 / + 14			- 140 / + 200		
three samples were taken from the		- 14 / + 16			- 200 / + 325		
same location - Samples taken from		- 16 / + 20			- 325		

RESULTS: the same location as sample # LA doth. - 7 Sept 1988

	RDX	TNT
Surface	1870-1920 ppm (0.19%)	32-33 ppm (0.0033%)
3"	97-122 ppm (0.011%)	< 15 ppm
12"	< 15 ppm	< 15 ppm

SIGNED: <i>Blake J. Mansfield</i>	DATE: <i>11/29/88</i>
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